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09/027,585 02/23/98 DAHL

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EXAMINER

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WEINHARDT, R

ART UNIT

PAPER NUMBER

2764

*F***DATE MAILED:** 09/23/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/027,585

Applicant(s)

Dahl

Examiner

Robert Weinhardt

Group Art Unit

2764



Responsive to communication(s) filed on _____.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-8 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-8 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. The preliminary amendments filed 2/23/98 have been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

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reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims and the specification both describe calls to the data element protection catalog as "compelling". No clear definition of compelling calls is found. While on page 6 lines 2+ a definition is attempted, the definition is circular as it includes the term "compellingly" to define compelling. Claim 1 and the specification also describe that the system is "controlled compellingly". Again, no clear definition of what applicant means by "compelling" is found. Further, the definition of "data element type" is not clear as it is set forth on page 4 lines 28+ as "a specific type of data having a meaning as agreed on". This provides little clear guidance as to what the term "data type" represents.

As a result, the specification is not clear as to the content and operation of the disclosed invention. For the purposes of examination, "compelling" calls and control will be read as required calls and control.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, "the PTY principle" lacks antecedent basis and the acronym "PTY" is not defined.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonnal et al.

As per claim 1, McDonnal et al. teach a method for processing data that is to be protected comprising storing the data as encrypted data element values in records in a first database (col. 10 lines 42-52, col. 33 line 66 to col. 34 line 8); storing in a second database a data element protection catalog which for each individual data element type contains one or more protection attributes stating processing rules for data element values (encrypting and decryption rules provided in file 169, abstract, col. 8 lines 6-49, col. 28 line 65 to col. 29 line 6, col. col. 34 lines 25-35); for each user-initiated

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measure aiming at processing a given data element value, producing a compelling calling to the protection catalog for collecting the attribute(s) associated with the data element and compellingly controlling the user's processing of the given data element in conformity with the collected attribute(s) (user launches program requesting an encrypted file, decryption of the file is transparently performed col. 13 line 48 to col. 14 line 24, fig. 2a-2b).

McDonnal fails to specifically teach that the data element values are linked to a corresponding data element type. McDonnal does teach that each secured directory has it's own unique rule file (col. 8 lines 45-49). As is well known in the art, and Official Notice is taken thereof, different types of files are typically stored in different directories. For example, WordPerfect documents are stored in one directory while Excel or PowerPoint documents are stored in another. Further, directory structures are often used to categorize files by purpose, topic or file characteristic. Given the vague definition of "data element type" in the specification, the above segregation of documents or categorization of files is seen to provide different directories containing documents of different data element types. Thus, it would have been obvious to those of ordinary skill in the art to modify the teachings of McDonnal to include such well known directory arrangements for the obvious advantage of conveniently locating stored data. As McDonnal does teach that each secured directory has it's own unique rule file which specifies the encryption algorithm used and that a good security system

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uses a gamut of encryption algorithms, the result of the obvious modification is data element values linked to a corresponding type wherein protection attributes are effectively assigned to the data element type via the rule file 169 for the directory.

With respect to claim 2, as McDonnal suggests that the rule file be kept in a separate file-server computer (col. 34 lines 30-35) and information therefrom must pass over a network to be used, it would have been obvious to those of ordinary skill in the art to modify the teachings of McDonnal to encrypt the protection attribute(s) and decrypt upon use in order to protect the encrypted data element values by protecting the information concerning the manner and keys used to secure the data element values.

With respect to claims 5 and 6, the protection attributes of McDonnal include identification of the encryption algorithm, which thus specifies rules for encryption and inherently, the program(s) to be used on the data. Regarding claim 7, as the encryption rules of McDonnal and the file type are used in storing data in secured or unsecured directories, this provides rules as to how data elements are logged in the first database.

Claim 8 parallels the limitations of claim 1 in apparatus form and is thus rejected for similar reasons.

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11. Claim 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonnal et al. as applied to claims 1-2 above, and further in view of applicant's admitted prior art.

McDonnal fails to specifically teach that the encryption is carried out according to the PTY principle and that the record identifier is encrypted. However, such encryption is admitted by applicant to be prior art. Note figs. 1-2 of the instant application. Thus, it would have been obvious to those of ordinary skill in the art to modify the teachings of McDonnal to include prior art PTY encryption for the known benefit of floating alteration of the identification of the records for increased security.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Taguchi et al. teach generation and selection of encryption keys according to an attribute of the target data. Diachana et al. teach different encryption algorithms associated with different classes of information (col. 29 line 56 to col. 30 line 25). Sung et al. teach different encryptions applied to different data. Bailey teaches replacing client specific data within a file with a code. Nagel et al. teach a different key associated with each separate item or file and key rules used to define the key. Hirose and Cane et al. teach files secured by different keys. Cooper et al. teach files with a

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decryption block indicating the encryption type. Burnett et al. teach a table holding generation rules for different types of objects.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Weinhardt whose telephone number is (703) 305-9780. The examiner can normally be reached on Monday-Friday from 7:30 AM - 4:00 PM. The examiner can also be reached at the e-mail address:

robert.weinhardt@uspto.gov

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768. Facsimile transmissions to this Group may be directed to (703) 308-1396.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

September 21, 1999



ROBERT A. WEINHARDT
PRIMARY EXAMINER